

Mineral Industry Surveys

For information, contact:

Daniel Edelstein, Copper Commodity Specialist

U.S. Geological Survey

989 National Center

Reston, VA 20192

Telephone: (703) 648-4978, Fax: (703) 648-7757

E-mail: dedelste@usgs.gov

Janet Richards (Data)

E-mail: jricharl@usgs.gov

Melissa Foley (Data)

E-mail: mfoley@usgs.gov

Telephone: (703) 648-7951

Fax: (703) 648-8975

MINES FaxBack: (703) 648-4999

Internet: <http://minerals.usgs.gov/minerals>

COPPER IN JUNE 1999

Primary refined copper production in the United States in June fell to the lowest monthly level since June of 1996 as concentrate production cutbacks and smelter closings led to a shortage of anode feed. Primary smelter production in June was at its lowest level since May of 1997. Total smelter and refinery production for the first 6 months of 1999 were down by 14% and 9%, respectively, compared to the same period in 1998. Consumption of refined copper for the first 6 months of 1999 was essentially unchanged from the same period in 1998. Despite the decline in production, the domestic supply of copper continued to outstrip consumption and inventories at the end of June were up by 104,000 tons, 20%, from yearend 1998 inventories. U.S. warehouses of the London Metal Exchange (LME) accounted for most of the increase, 77,000 tons, and at the end of June held 55% of global LME warehouse inventories.

According to preliminary data compiled by the International Copper Study Group, world copper mine production (5,260,000 tons) and refinery production (5,850,000 tons) for the first 5 months of 1999 were up by about 300,000 tons (6%) and 135,000 tons (2.4%), respectively, while world consumption of refined copper of 5,790,000 tons was essentially unchanged from that of the previous year. Production of refined copper continued to outstrip consumption and reported world inventories rose by about 180,000 tons. At the prevailing rate of consumption, world inventories at the end of May represented a 5.8-week supply of refined copper. In June 1997, just prior to the current downturn in copper prices, inventories represented only about 2.7 weeks of supply (Copper Bulletin, 1999, p. 7).

BHP Copper offered a clarification to its previously brief announcement concerning closure of its North American copper

facilities. According to Platt's Metals Week, mining was halted at the Robinson Mine in Nevada and the San Manuel Mine in Arizona by the end of June and a \$54-million smelter maintenance and upgrade was expected to be completed in July, despite BHP's announced intention not to restart the smelter. BHP was also reportedly developing a "curtailment plan" that would eventually idle its solvent extraction-electrowinning plants at Miami, Pinto Valley, and San Manuel, Arizona, which had a combined output of about 44,000 tons per year of copper cathode. BHP also intended to place its San Manuel rod mill on care and maintenance. Its White Pine, MI, refinery, which processed imported anode, was to remain in operation (Platt's Metals Week, 1999).

Price Update

The unexpected cutbacks announced by Phelps Dodge Corp. at the end of June (See Copper in May), coupled with the previously announced North American cutbacks, sparked a surge in copper prices. The COMEX spot price, which had settled at about \$0.65 per pound during the third week in June, ended the month at \$0.76. The price peaked at \$0.78 per pound on July 7 and remained near the \$0.75 level through the end of August.

References Cited

- Copper Bulletin, 1999, International Copper Study Group, Lisbon: Copper Bulletin, v. 6, no. 8, 47 p.
Platt's Metals Week, 1999, BHP shuts down 200,000mt/year of mine capacity: Platt's Metals Week, v. 70, no. 26, June 28, p. 1, 15.

TABLE 1
SALIENT STATISTICS OF THE COPPER INDUSTRY IN THE UNITED STATES 1/

(Metric tons, unless noted)

	Source table 2/	1998 p/	1999		
			May	June	January - June
Production:					
Primary:					
Mine, recoverable	(2)	1,860,000	136,000	133,000	865,000
Smelter 3/	(3)	1,490,000	85,400 r/	77,100	622,000
Refinery:					
Electrolytic:					
Domestic	(4)	1,290,000	106,000 r/	95,500	599,000
Foreign	(4)	238,000	12,300 r/	12,100	120,000
Electrowon	(4)	590,000	47,700	45,400	287,000
Total	(4)	2,120,000	166,000	153,000	1,010,000
Secondary recoverable copper:					
Refineries	(5)	336,000	16,200 r/	19,300	118,000
Ingot makers 4/	(5)	132,000	11,000	11,000	65,800
Brass and wire-rod mills	(5)	811,000	68,200	69,800	420,000
Foundries, etc.	(5)	55,400	4,610	4,610	27,700
Consumption:					
Total apparent	(8)	3,010,000	248,000	NA	NA
Refined (reported)	(7)	2,880,000	247,000 r/	253,000	1,500,000
Purchased copper-base scrap	(9)	1,720,000	148,000 r/	149,000	919,000
Stocks at end of period:					
Total refined	(11)	531,000	643,000 r/	634,000	XX
Blister, etc.	(11)	160,000	132,000 r/	135,000	XX
Prices:					
U.S. producer cathode (cents per pound) 5/	(12)	78.641	72.720	69.037	69.151
Imports: 6/					
Ores and concentrates 7/	(14)	217,000	10,400	NA	NA
Refined	(14)	683,000	62,300	NA	NA
Exports: 6/					
Ores and concentrates 7/	(15)	36,500	1,980	NA	NA
Refined	(15)	86,200	1,630	NA	NA

p/ Preliminary. r/ Revised. NA Not available. XX Not applicable.

1/ Data are rounded to three significant digits, except prices; may not add to totals shown.

2/ Numbers in parentheses refer to the detailed tables where these data are located.

3/ From domestic and foreign ores.

4/ Monthly data estimated based on 1997 monthly average.

5/ Source: Platt's Metals Week.

6/ Source: Bureau of the Census.

7/ Copper content.

TABLE 2
MINE PRODUCTION OF RECOVERABLE COPPER
IN THE UNITED STATES 1/

(Metric tons)

Period	State		Total
	Arizona	Others 2/	
1998: p/			
June	99,600	52,200	152,000
July	102,000	55,600	158,000
August	102,000	61,600	163,000
September	97,000	56,900	154,000
October	95,900	59,900	156,000
November	97,300	57,400	155,000
December	101,000	56,600	157,000
January - June	497,000	264,000	761,000
Year	1,190,000	668,000	1,860,000
1999:			
January	99,400	55,500	155,000
February	89,600	48,300	138,000
March	102,000	56,700	159,000
April	95,000	49,200	144,000
May	87,700	48,100	136,000
June	88,100	45,300	133,000
January - June	562,000	303,000	865,000

p/ Preliminary. r/ Revised.

1/ Data are rounded to three significant digits; may not add to totals shown.

2/ Includes production from Alaska, Idaho, Missouri, Montana, Nevada, New Mexico, Tennessee, and Utah.

TABLE 3
COPPER PRODUCED AT SMELTERS IN THE
UNITED STATES, BY SOURCE 1/ 2/

(Metric tons, copper content)

Period	Domestic and foreign ores		Scrap	Total
1998: p/				
June	97,900	18,800		117,000
July	124,000	19,200		143,000
August	121,000	19,700		141,000
September	116,000	18,000		134,000
October	156,000	17,100		173,000
November	134,000	19,000		153,000
December	120,000	18,000		138,000
January - June	715,000 r/	121,000 r/		836,000
Year	1,490,000	232,000		1,720,000
1999:				
January	106,000	18,300		125,000
February	113,000	16,100		129,000
March	116,000	14,700		131,000
April	124,000	15,600 r/		140,000
May	85,400 r/	14,000 r/		99,400
June	77,100	18,600		95,700
January - June	622,000	97,400		719,000

p/ Preliminary. r/ Revised.

1/ Includes blister, anode and black copper from primary or secondary sources.

2/ Data are rounded to three significant digits; may not add to totals shown.

TABLE 4
PRODUCTION OF REFINED COPPER, BY SOURCE AND METHOD OF RECOVERY 1/

(Metric tons)

Period	Primary materials				Scrap			Total refined
	Electrolytically refined 2/		Electrowon	Total	Electro-lytically refined 2/	Fire refined	Total	
	Domestic 3/	Foreign						
1998: p/								
June	95,000	18,100	49,500	163,000	15,500	9,650	25,200	188,000
July	93,300	22,500	51,400	167,000	18,000	11,500	29,500	197,000
August	106,000	19,000	50,900	176,000	11,800	13,400	25,200	201,000
September	102,000	23,200	48,300	174,000	15,600	9,380	25,000	199,000
October	107,000	26,100	48,000	181,000	17,500	15,500	33,100	214,000
November	106,000	24,400	50,000	181,000	14,700	8,630	23,300	204,000
December	115,000	22,300	51,300	189,000	17,000	9,320	26,400	215,000
January - June	663,000 r/	101,000 r/	290,000	1,050,000 r/	107,000 r/	66,700 r/	174,000 r/	1,230,000 r/
Year	1,290,000	238,000	590,000	2,120,000	202,000	134,000	336,000	2,460,000
1999:								
January	85,400	26,700	50,300	162,000	12,500	7,230	19,700	182,000
February	84,200	24,200	45,700	154,000	12,400	9,100	21,500	176,000
March	117,000	25,600	50,500	193,000	14,700	8,970	23,700	217,000
April	111,000 r/	19,100	47,800	178,000	12,100	5,550	17,700	195,000 r/
May	106,000 r/	12,300 r/	47,700	166,000	11,300 r/	4,880 r/	16,200 r/	182,000 r/
June	95,500	12,100	45,400	153,000	12,500	5,010	17,500	170,000
January - June	599,000	120,000	287,000	1,010,000	75,400	40,700	116,000	1,120,000

p/ Preliminary. r/ Revised.

1/ Data are rounded to three significant digits; may not add to totals shown.

2/ Based on source of material at smelter level.

3/ Includes fire-refined copper.

TABLE 5
COPPER RECOVERABLE IN UNALLOYED AND ALLOYED FORM FROM PURCHASED COPPER-BASED SCRAP 1/

(Metric tons, copper content)

Period	Refineries 2/		Ingot makers 3/		Brass and wire-rod mills		Foundries, etc. 4/		Total 5/
	New scrap	Old scrap	New scrap	Old scrap	New scrap	Old scrap	New scrap	Old scrap	
1998: p/									
June	5,120	20,100	2,930	8,040	67,300	3,260	956	3,660	111,000
July	5,810	23,600	2,930	8,040	60,300	3,390	956	3,660	109,000
August	7,550	17,600	2,930	8,040	61,800	2,930	956	3,660	105,000
September	4,770	20,200	2,930	8,040	67,100	3,080	956	3,660	111,000
October	9,630	23,400	2,930	8,040	67,000	2,690	956	3,660	118,000
November	4,090	19,200	2,930	8,040	63,400	2,790	956	3,660	105,000
December	4,500	21,900	2,930	8,040	61,800	1,370	956	3,660	105,000
January - June	37,000 r/	137,000 r/	17,600 r/	48,200 r/	399,000 r/	14,100	5,740 r/	21,900 r/	681,000 r/
Year	73,300	263,000	35,200	96,500	781,000	30,400	11,500	43,900	1,330,000
1999:									
January	3,290	16,400	2,930	8,040	64,600	2,740	956	3,660	103,000
February	4,480	17,000	2,930	8,040	66,400	3,030	956	3,660	106,000
March	5,130	18,600	2,930	8,040	72,800	3,070	956	3,660	115,000
April	3,830	13,800	2,930	8,040	67,200	2,540	956	3,660	103,000
May	3,630 r/	12,500 r/	2,930	8,040	66,200 r/	2,020	956	3,660	100,000 r/
June	3,790	15,500	2,930	8,040	67,400	2,410	956	3,660	105,000
January - June	24,200	93,800	17,600	48,200	405,000	15,800	5,740	21,900	632,000

p/ Preliminary. r/ Revised.

1/ Data are rounded to three significant digits; may not add to totals shown.

2/ Electrolytically refined and fire-refined scrap based on source of material at smelter level.

3/ Data no longer collected monthly; data estimated based on 1997 annual data.

4/ Data estimated based on 1997 annual data.

5/ Does not include an estimate, based on reported 1997 data, of 3,900 tons per month from new scrap and 2,530 tons per month from old scrap of copper recovered from scrap other than copper-base.

TABLE 6
PRODUCTION, SHIPMENTS, AND STOCKS OF BRASS AND WIRE-ROD MILL SEMIFABRICATES 1/

(Metric tons, gross weight)

Period	Production		Shipments		Stocks, end of period	
	Brass mills	Wire rod mills	Brass mills	Wire rod mills	Brass mills	Wire rod mills
1998: p/						
June	113,000	173,000	122,000	176,000	53,100	40,300
July	130,000	166,000	126,000	165,000	57,100	41,000
August	130,000	160,000	129,000	167,000	57,900	33,900
September	140,000	172,000	138,000	174,000	59,600	31,300
October	138,000	185,000	138,000	185,000	60,300	30,700
November	132,000	181,000	133,000	172,000	59,300	39,800
December	128,000	144,000	125,000	153,000	62,500	30,900
January - June	789,000 r/	1,090,000	801,000 r/	1,080,000	XX	XX
Year	1,590,000	2,100,000	1,590,000	2,100,000	XX	XX
1999:						
January	138,000	180,000	141,000	174,000	59,500	36,800
February	134,000	178,000	135,000	175,000	58,000	40,100
March	139,000	190,000	146,000	193,000	50,500	37,100
April	142,000	182,000	138,000	184,000	54,000	35,800
May	138,000	177,000 r/	137,000 r/	176,000 r/	53,900 r/	36,200 r/
June	138,000	183,000	140,000	183,000	51,000	35,800
January - June	828,000	1,090,000	838,000	1,090,000	XX	XX

p/ Preliminary. r/ Revised. XX Not applicable.

1/ Data are rounded to three significant digits; may not add to totals shown.

TABLE 7
CONSUMPTION OF REFINED COPPER 1/

(Metric tons)

Period and item	Wire rod mills	Brass mills 2/	Other plants 3/	Total
1998: p/				
June	181,000	52,700	4,310	238,000
July	173,000	50,500	4,310	228,000
August	165,000	54,800	4,310	224,000
September	165,000	56,100	4,310	226,000
October	196,000	57,100	4,310	257,000
November	190,000	52,900	4,310	247,000
December	149,000	51,600	4,310	204,000
January - June	1,140,000 r/	336,000 r/	25,800 r/	1,500,000
Year	2,170,000	659,000	51,700	2,880,000
1999:				
January	186,000	58,400	4,310	249,000
February	185,000	50,900	4,310	240,000
March	209,000	55,500	4,310	269,000
April	184,000	53,800 r/	4,310	242,000
May	183,000 r/	59,900 r/	4,310	247,000 r/
June:				
Cathodes	187,000	44,200	944	232,000
Wire bars	--	--	W	W
Ingots and ingot bars	--	1,520	1,540	3,070
Cakes and slabs	--	6,250	W	6,250
Billets and other	1,430	7,910	1,820	11,200
Total	189,000	59,900	4,310	253,000
January - June	1,140,000	338,000	25,800	1,500,000

p/ Preliminary. r/ Revised. W Withheld to avoid disclosing company proprietary data; included with "Billets and other."

1/ Data are rounded to three significant digits; may not add to totals shown.

2/ In 1997, brass mills consumed 1,500 tons of refined lead, 700 tons of pig tin, 2,300 tons of refined nickel, and 54,400 tons of slab zinc.

3/ Consumption by ingot makers, chemical plants, foundries, and miscellaneous manufacturers is estimated based on 1997 annual data.

TABLE 8
U.S. APPARENT CONSUMPTION OF COPPER 1/

(Metric tons)

Period	Refined copper production	Copper in old scrap 2/	Refined general imports 3/	Refined exports 3/	Stock change during period	Apparent consumption
1998: p/						
June	163,000	37,500	52,800	6,300	(582)	247,000
July	167,000	41,300	55,400	7,470	7,440	249,000
August	176,000	34,800	49,600	6,360	14,700	239,000
September	174,000	37,500	77,000	5,820	37,700	245,000
October	181,000	40,400	53,200	4,990	15,500	254,000
November	181,000	36,300	70,300	3,610	37,100	247,000
December	189,000	37,500	54,700	6,200	64,600	210,000
January - May	891,000	199,000 r/	312,000	45,500	40,800 r/	1,320,000 r/
Year	2,120,000	464,000	725,000	86,200	217,000	3,010,000
1999:						
January	162,000	33,400	64,700	2,350	26,000	232,000
February	154,000	34,300	58,500	1,120	24,700	221,000
March	193,000	35,900	86,000	1,840	31,300	282,000
April	178,000	30,600	66,300	1,340	28,000 r/	245,000 r/
May	166,000 r/	28,800 r/	57,100	1,630	2,160 r/	248,000
June	153,000	32,100	NA	NA	(9,110)	NA
January - May	853,000	163,000	333,000	8,280	112,000	1,230,000

p/ Preliminary. r/ Revised. NA Not available.

1/ Data are rounded to three significant digits; may not add to totals shown.

2/ Includes reported monthly production of copper from old scrap of copper-base and estimates for annual reporters and of non-copper-base materials based on 1997 data.

3/ Source: Bureau of the Census.

TABLE 9
CONSUMPTION OF PURCHASED COPPER-BASE SCRAP 1/

(Metric tons, gross weight)

Period	Smelters and refineries		Ingot makers 2/		Brass and wire-rod mills 3/		Foundries, etc. 2/		Total scrap used
	New scrap	Old scrap	New scrap	Old scrap	New scrap	Old scrap	New scrap	Old scrap	
1998: p/									
June	7,550	29,100	3,910	11,700	84,400	3,360	1,130	4,090	145,000
July	7,150	30,900	3,910	11,700	76,500	3,460	1,130	4,090	139,000
August	8,950	32,500	3,910	11,700	78,000	3,010	1,130	4,090	143,000
September	5,910	25,800	3,910	11,700	84,200	3,190	1,130	4,090	140,000
October	10,600	28,600	3,910	11,700	84,800	2,770	1,130	4,090	148,000
November	5,270	29,800	3,910	11,700	80,400	2,870	1,130	4,090	139,000
December	4,900	27,500	3,910	11,700	78,500	1,440	1,130	4,090	133,000
January - June	44,700 r/	188,000 r/	23,400 r/	70,300 r/	505,000	14,700	6,800 r/	24,500 r/	877,000 r/
Year	87,500	363,000	46,900	141,000	987,000	31,400	13,600	49,100	1,720,000
1999:									
January	4,360	43,300	3,910	11,700	81,200	2,800	1,130	4,090	153,000
February	5,490	42,800	3,910	11,700	83,900	3,130	1,130	4,090	156,000
March	5,620	39,600	3,910	11,700	92,500	3,170	1,130	4,090	162,000
April	4,340 r/	38,300 r/	3,910	11,700	85,700	2,620	1,130	4,090	152,000
May	4,310 r/	36,400	3,910	11,700	83,900 r/	2,090	1,130	4,090	148,000 r/
June	4,390	36,100	3,910	11,700	85,500	2,500	1,130	4,090	149,000
January - June	28,500	236,000	23,400	70,300	513,000	16,300	6,800	24,500	919,000

p/ Preliminary. r/ Revised.

1/ Data are rounded to three significant digits; may not add to totals shown.

2/ Data estimated from 1997 annual data.

3/ Consumption at brass and wire-rod mills assumed equal to receipts.

TABLE 10
CONSUMPTION OF PURCHASED COPPER-BASE SCRAP 1/ 2/

(Metric tons, gross weight)

Scrap type and processor	1998 p/		1999			
	January - June	Year	April	May	June	January - June
No. 1 wire and heavy:						
Smelters and refiners	76,500 r/	139,000	7,570	5,940	6,800	42,200
Brass and wire-rod mills	207,000 r/	411,000	35,800	35,900 r/	36,400	217,000
No. 2 mixed heavy and light:						
Smelters and refiners	95,100 r/	199,000	11,400 r/	10,600 r/	10,200	78,100
Brass and wire-rod mills	17,700	32,600	1,510	1,080	1,680	13,000
Total unalloyed scrap:						
Smelters and refiners	172,000 r/	338,000	19,000 r/	16,600 r/	17,000	120,000
Brass and wire-rod mills	225,000 r/	443,000	37,300	37,000 r/	38,100	230,000
Red brass: 3/						
All plants	32,700 r/	63,200	5,200	5,270 r/	5,130	31,500
Leaded yellow brass:						
All plants	213,000 r/	422,000	36,800	35,500	36,600	215,000
Yellow and low brass:						
All plants	30,900	60,700	6,230	5,910	5,760	36,800
Cartridge cases and brass:						
Smelters and refiners	W	W	W	W	W	W
Brass mills	42,900	81,700	6,830	6,770 r/	6,900	40,600
Auto radiators:						
Smelters and refiners	31,300 r/	61,400	6,020	6,040	5,950	36,000
Bronzes:						
Smelters and refiners	6,050 r/	12,100	1,010	1,010	1,010	6,050
Brass mills	7,060 r/	13,600	730	942 r/	602	5,240
Nickel-copper alloys:						
All plants	8,740	17,100	1,960	1,410 r/	1,670	10,100
Low grade & residues:						
Smelters and refiners	63,800 r/	119,000	23,000 r/	24,000 r/	23,400	142,000
Other alloy scrap: 4/						
Smelters and refiners 5/	10,400 r/	20,200 r/	2,070 r/	1,580 r/	1,590	11,200
Brass mills	2,270	4,620	409	400	399	2,440
Total alloyed scrap:						
Smelters and refiners	155,000 r/	300,000	39,300 r/	39,800 r/	39,100	239,000
Brass mills	295,000 r/	575,000	51,000	49,000 r/	49,900	299,000
Total scrap:						
Smelters and refiners	326,000 r/	638,000	58,200 r/	56,400 r/	56,100	359,000
Brass and wire-rod mills	519,000	1,020,000	88,300	86,000 r/	88,000	529,000

p/ Preliminary. r/ Revised. W Withheld to avoid disclosing company proprietary data.

1/ Does not include: consumption by foundries, chemical plants, and miscellaneous manufacturers, estimated to total about 5,200 tons of scrap per month in 1997; monthly data include estimates of about 32,000 tons of scrap per month consumed by ingot makers and several smelters that report on an annual basis.

2/ Data are rounded to three significant digits; may not add to totals shown.

3/ Includes composition turnings, silicon bronze, zincy bronze, railroad car boxes, cocks and faucets, gilding metal, and commercial bronze.

4/ Includes refinery brass, beryllium copper, phosphor copper, and aluminum bronze.

5/ Includes items indicated by symbol W.

TABLE 11
COPPER STOCKS AT END OF PERIOD 1/

(Metric tons)

Period	Crude copper 2/	Refined copper					Total refined	
		Refineries 3/	Wire rod mills 3/	Brass mills 3/	Other 4/	Comex 5/		LME 6/
1998: p/								
June	130,000	40,200	30,700	20,900	2,700	57,600	202,000	354,000
July	143,000	34,300	33,700	16,600	2,700	50,500	224,000	361,000
August	153,000	40,700	32,100	21,400	2,700	51,400	228,000	376,000
September	144,000	37,500	37,100	21,400	2,700	61,400	254,000	414,000
October	156,000	35,100	25,100	15,500	2,700	69,400	282,000	429,000
November	182,000	34,300	28,200	17,500	2,700	67,700	316,000	466,000
December	160,000	44,200	37,300	20,800	2,700	85,200	341,000	531,000
1999:								
January	143,000	45,600	43,100	20,600	2,700	92,400	353,000	557,000
February	148,000	44,100	32,400	22,000	2,700	104,000	377,000	582,000
March	132,000	48,200	29,700	21,000	2,700	112,000	400,000	613,000
April	147,000	49,200 r/	27,200 r/	21,200	2,700	120,000	420,000	641,000
May	132,000 r/	43,200 r/	33,600 r/	20,800 r/	2,700	119,000	424,000	643,000 r/
June	135,000	44,400	28,900	18,700	2,700	121,000	418,000	634,000

p/ Preliminary. r/ Revised.

1/ Data are rounded to three significant digits; may not add to totals shown.

2/ Copper content of blister and other materials in transit and in process of refining.

3/ Stocks of refined copper as reported; no estimates are made for non-respondents.

4/ Monthly estimates based on reported and 1997 annual data, comprising stocks at secondary smelters, chemical plants, foundries, and miscellaneous manufacturers.

5/ Commodity Exchange Inc., New York.

6/ London Metal Exchange Ltd., U.S. warehouses.

TABLE 12
AVERAGE PRICE OF COPPER IN THE UNITED STATES AND
ON THE LONDON METAL EXCHANGE

(Cents per pound)

Period	U.S. producers delivered price cathode 1/	Comex first position 2/	LME cash price Grade A
1998:			
June	78.553	74.902	75.302
July	79.033	75.373	74.872
August	76.962	73.302	73.501
September	79.277	75.617	74.716
October	75.926	72.266	71.940
November	75.210	71.513	71.377
December	69.915	66.255	66.825
January - December	78.641	75.077	75.008
1999:			
January	68.726	65.066	64.902
February	67.594	63.934	63.974
March	66.164	62.504	62.505
April	70.662	67.002	66.475
May	72.720	69.060	68.528
June	69.037	65.227	64.506
January - June	69.151	65.466	65.148

1/ Listed as "U.S. producer cathode."

2/ Listed as "Comex high grade first position."

Sources: Platt's Metals Week and American Metal Market.

TABLE 13
NEW YORK AVERAGE BUYING PRICES FOR COPPER SCRAP

(Cents per pound)

Month	Brass mills No. 1 scrap	Refiners No. 2 scrap	Dealers (New York)	
			No. 2 scrap	Red brass turnings and borings
1998:				
June	73.68	60.15	48.95	40.00
July	74.10	60.60	47.95	40.00
August	72.24	59.06	49.00	40.00
September	73.31	60.33	49.00	40.00
October	71.00	57.55	47.00	40.00
November	70.37	57.14	46.00	40.00
December	65.40	52.70	41.91	36.73
January - December	73.55	60.19	49.46	40.33
1999:				
January	64.11	51.17	39.32	36.00
February	63.13	51.07	39.00	36.84
March	62.04	50.75	39.00	38.00
April	65.94	54.58	39.00	38.00
May	68.59	56.68	42.80	38.95
June	64.69	52.57	41.55	36.82
January - June	64.75	52.80	40.11	37.44

Source: American Metal Market.

TABLE 14
U.S. IMPORTS FOR CONSUMPTION OF COPPER (UNMANUFACTURED), BY CLASS 1/

(Metric tons, copper content)

Country or territory	Ore and concentrate			Matte, ash and precipitates			Blister and anodes			Refined		
	1999			1999			1999			1999		
	1998	May	January - May	1998	May	January - May	1998	May	January - May	1998	May	January - May
Argentina	9,930	--	--	--	--	--	--	--	--	--	--	--
Brazil	--	--	--	--	--	--	--	--	--	9,000	301	5,110
Canada	1,690	1	1	140	--	--	82,100	5,170	33,200	265,000	21,800	114,000
Chile	147,000	10,400	50,000	--	--	--	24,100	11,200	24,000	78,700	11,400	25,100
Denmark	--	--	--	54	--	--	--	--	--	--	--	--
Indonesia	29,400	--	31,900	--	--	--	--	--	--	--	--	--
Japan	--	--	--	240	--	49	(2/)	--	(2/)	8,680	271	1,990
Kazakhstan	--	--	--	--	--	--	--	--	--	--	1,520	4,330
Mexico	4,980	--	500	998	60	454	29,400	5,620	9,640	178,000	6,270	64,600
Namibia	--	--	--	--	--	--	3,360	--	--	--	--	--
Netherlands	--	--	--	551	--	339	--	--	--	4,570	--	1,760
Papua New Guinea	5,900	--	--	--	--	--	--	--	--	--	--	--
Peru	18,200	--	--	--	--	--	6,870	--	2,830	128,000	15,400	74,100
Russia	--	--	--	--	--	--	--	--	--	9,170	4,930	16,700
South Africa	--	--	--	--	--	--	2,830	--	--	--	--	100
Taiwan	--	--	--	213	20	90	--	--	--	42	21	41
Other	12	--	12	39 r/	2	19	1,480	--	258	2,510	459	739
Total	217,000	10,400	82,400	2,230	82	950	150,000	21,900	69,900	683,000	62,300	308,000

r/ Revised.

1/ Data are rounded to three significant digits; may not add to totals shown.

2/ Less than 1/2 unit.

Source: Bureau of the Census.

TABLE 15
U.S. EXPORTS OF COPPER (UNMANUFACTURED), BY CLASS 1/

(Metric tons, copper content)

Country or territory	Ore and concentrate			Matte, ash and precipitates			Blister and anodes			Refined		
	1999			1999			1999			1999		
	January -			January -			January -			January -		
	1998	May	May	1998	May	May	1998	May	May	1998	May	May
Australia	45	--	--	18	--	2	58	--	245	29	--	--
Belgium	39	--	--	323	--	(2/)	961	--	22	17	--	399
Canada	33,600	1,980	9,020	12,800	3,550	17,800	16,400	3,250	11,300	16,100	1,390	7,000
France	--	--	1	30	--	--	554	--	140	37	2	7
Germany	1,470	--	--	6,660	11	22	92	19	39	294	68	69
Hong Kong	15	--	--	--	--	--	3,350	266	1,570	1,310	68	114
Italy	34	--	--	--	--	--	354	20	205	69	--	7
Japan	1,050	--	--	34	--	--	695	41	493	17,000	3	53
Korea, Republic of	46	--	14	15	--	--	130	65	172	2,870	--	18
Mexico	97	--	8,480	1,060	--	23	1,330	1	11	11,200	51	464
Netherlands	3	--	--	4	--	10	2	--	2	10,100	--	--
Singapore	--	--	--	6	--	--	726	46	272	687	--	--
Sweden	--	--	--	945	--	--	--	--	--	3	--	--
Taiwan	(2/)	--	--	--	--	14	1,800	139	663	19,100	--	6
Thailand	18	--	--	--	--	--	46	--	30	5,830	--	--
Other	152	--	124	97	6	49	604	84	458	1,620	58	148
Total	36,500	1,980	17,600	22,000	3,560	17,900	27,100	3,930	15,600	86,200	1,630	8,280

1/ Data are rounded to three significant digits; may not add to totals shown.

2/ Less than 1/2 unit.

Source: Bureau of the Census.

TABLE 16
U.S. COPPER SCRAP TRADE 1/

(Metric tons, gross weight)

Country or territory	Imports						Exports					
	Unalloyed			Alloyed			Unalloyed			Alloyed		
	1999		January - May	1999		January - May	1999		January - May	1999		January - May
	1998	May		1998	May		1998	May		1998	May	
Belgium	80	--	--	476	--	213	2,730	124	561	434	37	209
Bulgaria	1,010	--	--	--	--	--	--	--	--	--	--	--
Canada	30,900	461	2,630	55,800	3,680	20,000	39,600	2,750	7,910	68,200	2,670	18,800
Chile	3,310	580	2,200	1,440	78	660	--	--	--	3	--	--
China	--	--	--	101	296	307	28,600	4,460	15,300	20,700	3,420	13,900
Colombia	836	103	267	2,560	298	819	--	--	--	4	--	--
Costa Rica	800	32	224	778	64	359	--	--	--	--	--	--
Dominican Republic	942	81	609	1,250	68	316	--	--	--	--	--	20
Germany	6	--	--	54	--	2	7,800	77	496	5,920	147	854
Guatemala	519	10	12	969	83	854	--	--	--	--	--	--
Hong Kong	--	--	--	113	--	11	14,400	508	2,850	23,600	385	1,800
India	--	--	--	--	--	--	3,460	189	1,460	24,900	1,780	13,500
Japan	19	11	85	126	--	49	10,200	673	3,160	10,400	1,040	4,930
Korea, Republic of	15	--	--	150	17	73	2,720	599	3,750	11,600	3,450	18,400
Malaysia	--	--	--	1,440	139	350	286	--	79	234	40	157
Mexico	12,900	885	4,220	35,400	2,510	12,300	1,230	20	207	10,200	1,030	6,570
Spain	12	16	16	477	185	367	60	6	2,740	1,860	--	--
Taiwan	109	--	16	720	32	297	2,110	380	1,170	6,210	812	3,120
United Kingdom	--	--	--	1,090	18	405	176	--	421	3,890	380	1,110
Venezuela	462	27	164	1,500	125	512	--	--	--	37	--	--
Other	2,480 r/	84	643	6,880	504	2,410	761	219	1,500	5,170	986	2,470
Total	54,400	2,290	11,100	111,000	8,100	40,300	114,000	10,000	41,600	193,000	16,200	85,700

r/ Revised.

1/ Data are rounded to three significant digits; may not add to totals shown.

Source: Bureau of the Census.